

DATE: Wednesday, August 20, 2003 Printable Copy Create Case

Set Name	Query	Hit Count	Set Name
side by side			result set
DB = USP	T,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ		
<u>L5</u>	L4 same 13	42	<u>L5</u>
<u>L4</u>	cationic lipid or amphiphile or liposome	42823	<u>L4</u>
<u>L3</u>	L2 with 11	215	<u>L3</u>
<u>L2</u>	dna or nucleic or plasmid or polynucleotide	197279	<u>L2</u>
<u>L1</u>	cyclodextrin	17182	<u>L1</u>

END OF SEARCH HISTORY

(FILE 'HOME' ENTERED AT 17:35:35 ON 18 JAN 2002)

FILE 'MEDLINE, CANCERLIT, BIOTECHDS, CAPLUS, EMBASE' ENTERED AT 17:35:51 ON 18 JAN 2002

31552 S CYCLODEXTRIN# L1

554442 S AMPHIPHILE OR LIPID OR LIPOSOME L2

924 S L2 AND L1 L3

2541719 S DNA OR NUCLEOTIDE OR NUCLEIC OR PLASMID OR VECTOR L4

41 S L4 AND L3 L5

33 DUP REM L5 (8 DUPLICATES REMOVED) L6

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ANSWER 27 OF 33 CAPLUS COPYRIGHT 2002 ACS
L6
     1996:369786 CAPLUS
AN
     125:41790
DN
    Preparation of multivesicular liposomes for controlled release of active
ΤI
     agents
     Sankaram, Mantripragada B.; Kim, Sinil
ΙN
     Depotech Corporation, USA
PΑ
     PCT Int. Appl., 34 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
                                        APPLICATION NO. DATE
                    KIND DATE
     PATENT NO.
                                          ______
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     ______
                     A1 19960321 WO 1995-US11609 19950913
     WO 9608235
PΙ
         W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,
             GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD,
             MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ,
             TM, TT
         RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT,
             LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE,
             SN, TD, TG
                                          US 1994-305158
                                                            19940913
                            19991130
     US 5993850
                       Α
                                           CA 1995-2199004
                                                           19950913
     CA 2199004
                       AΑ
                            19960321
                                                            19950913
                                          AU 1995-35115
                            19960329
     AU 9535115
                       A1
                            19981008
     AU 697484
                       B2
                                          EP 1995-931820
                                                           19950913
                          19970702
                      A1
     EP 781123
         R: DE, GB
                                          CN 1995-196186
                                                            19950913
                       A 19971126
     CN 1166136
                                           BR 1995-8913
                                                            19950913
                          19971230
     BR 9508913
                      Α
                                                            19950913
                      B2 20000327
                                           JP 1996-510312
     JP 3026271
                      T2 19980310
     JP 10502667
                                                            19970312
     FI 9701037
                                           FI 1997-1037
                       A 19970512
                                           NO 1997-1149
                                                            19970312
                            19970513
     NO 9701149
                      Α
                            19940913
                      Α
PRAI US 1994-305158
                            19950913
                      W
     WO 1995-US11609
     A process for producing multivesicular liposomes (MVL's) for controlled
AB
     release of biol. active substances comprise (1) forming a water-in-oil
     emulsion from two immiscible components, a lipid component
     contg. org. solvent, an amphiphilic lipid and a neutral
     lipid, and a first aq. component contg. an active substance, (2)
     dispersing the emulsion into a second aq. component to form solvent
     spherules, and (3) removing the org. solvent from the solvent spherules to
     form the multivesicular liposomes. The osmolarity of the first aq. component is chosen to modulate the rate of release from multivesicular
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liposomes into a physiol. aq. environment. The rate of release of the active substance can be decreased by increasing the osmolarity of the

first aq. component or increased by decreasing the osmolarity.

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ANSWER 24 OF 33 BIOTECHDS COPYRIGHT 2002 DERWENT INFORMATION LTD
L6
     1998-10876 BIOTECHDS
ΑN
     Use of polynucleotide compositions;
TI
         for intra-pericardial delivery for treatment or prevention of
         cardiovascular indications e.g. cardiomyopathy, occlusions or
         inflammation
     Hung D T
ΑU
     Chiron
PΑ
      Emeryville, CA, USA.
LO
      WO 9716169 9 May 1997
PΙ
      WO 1996-US17311 30 Oct 1996
ΑI
     US 1996-726346 28 Oct 1996; US 1995-7158 1 Nov 1995
PRAI
      Patent
DT
LA
      English
      WPI: 1997-271858 [24]
OS
      A method of treatment or prevention of a wide range of cardiovascular
AΒ
      indications is claimed and comprises administering a polynucleotide (a
      plasmid or a viral vector e.g. an adeno virus)
      associated with a liposome, cyclodextrin
      liposome, heterovesicular liposome, synthetic membrane
      vesicle, gel, etc., and a therapeutic agent composition
      intra-pericardially to a patient. The polynucleotide may encode basic
      fibroblast growth factor, tumor necrosis factor-alpha, heparin, antibody,
      hepatocyte growth factor, proliferin, insulin-like growth factor, etc.,
      transfected using a ribozyme, antisense oligonucleotide, antibody, etc.
      Also claimed is a kit for such a delivery. The method can be used for
      treating a wide range of cardiovascular disorders including coronary
      artery occlusion resulting from or associated with lipid
      /cholesterol deposition, thrombosis, angina, and also metabolic disease
      e.g. glycogen storage disease, neuromuscular disease, trauma,
      inflammatory conditions, connective tissue diseases, bacterium, virus,
      fungus or parasite infection. A higher transduction efficiency is
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afforded by pericardial administration. (70pp)

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(1) Ahmed, M; Intern J Pharm 1998, V171, P111 CAPLUS
(2) Cingi, M; Toxicol In Vitro 1991, V5, P119 CAPLUS
(3) De, R; Nuovo Cimento Soc Ital Fis D 1997, V19D, P955 CAPLUS
(4) De Azevedo, M; J Incl Phenom 2000, V37, P67 CAPLUS
(5) De Conti, R; In Vitro Mol Toxicol 1998, V11, P153 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 17 OF 33 CAPLUS COPYRIGHT 2002 ACS
L6
AN
     1999:193980 CAPLUS
DN
     130:227746
ΤI
     Modulation of drug loading in multivesicular liposomes
     Ye, Qiang; Katre, Nandini; Sankaram, Mantripragada
IN
     Depotech Corporation, USA
PA
     PCT Int. Appl., 54 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
    English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO. DATE
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     WO 9912523
                     A1
                            19990318
                                         WO 1998-US18739 19980908
PΙ
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                           US 1997-925532
    US 6106858
                            20000822
                       Α
                                                             19970908
     AU 9893101
                                           AU 1998-93101
                            19990329
                                                             19980908
                       Α1
     EP 1011637
                                           EP 1998-945975
                            20000628
                      A1
                                                             19980908
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
                       T2
     JP 2001515853
                                           JP 2000-510422
                            20010925
                                                             19980908
    NO 2000001179
                                           NO 2000-1179
                      Α
                            20000404
                                                             20000307
PRAI US 1997-925532
                            19970908
                       Α1
     WO 1998-US18739
                     W
                            19980908
AΒ
    Disclosed is a method for making liposomes, for example multivesicular
     liposomes (MVLs), contg. one or more biol. active agents, wherein the
     loading of the active agents into the liposomes is modulated by adjusting
     the osmolarity of the aq. component into which the agents are dissolved
    prior to encapsulation. To increase the loading of the active agent, the
     osmolarity of the aq. component is reduced, and to decrease the loading of
     the active agent, the osmolarity of the aq. component is increased. In
     the making of MVLs, the process involves dissolving the active agent and
     an optimal osmotic excipient in a first ag. component encapsulated within
     the liposomes. For any given concn. of drug, the osmolarity of the first
     aq. component can be adjusted by increasing or decreasing the concn. or
     mol. wt. of the osmotic excipients used therein. The rate of release of
     the active agent into the surrounding environment in which the liposomes
     are introduced can be simultaneously controlled by incorporating into the
     lipid component used in the formulation at least one long chain
     amphipathic lipid. For example the amphipathic lipid
     can have from about 13 to about 28 carbons for example, from about 18 to
     about 22 carbons, in its carbon chain. Use of the long chain amphipathic
     lipid in the lipid component is particularly helpful in
     controlling the release rate and encapsulation efficiency for high drug
     load formulations. A water-in-oil prepn. was prepd. by mixing a
     lipid component comprising 1,2-dioleoyl-sn-glycero-3-
     phosphocholine 13.20, cholesterol 19.88, 1,2-dipalmitoyl-sn-glycero-3-
     phosphocholine 2.79, and triolein 2.44 mM in chloroform with an aq.
     component comprising cytarabine 40 mg/mL, sucrose 8.0%, and citric acid 20
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- L6 ANSWER 7 OF 33 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
- AN 2001200321 EMBASE
- Transfection of urothelial cells using methyl-.beta.-cyclodextrin solubilized cholesterol and Dotap.
- AU Lawrencia C.; Mahendran R.; Esuvaranathan K.
- CS R. Mahendran, Department of Surgery, National University of Singapore, 10 Kent Ridge Crescent, Singapore 119260, Singapore
- SO Gene Therapy, (2001) 8/10 (760-768).
 - Refs: 29
 - ISSN: 0969-7128 CODEN: GETHEC
- CY United Kingdom
- DT Journal; Article
- FS 022 Human Genetics
 - 037 Drug Literature Index
- LA English
- SL English
- The murine urothelial cell line, MB49 was transfected with the reporter AB gene pCMVlacZ using a number of commercial transfection agents. The transfection efficiency of these agents, as determined by .beta.-galactosidase activity, is in the order of Dotap>Superfect>Fugene. The addition of methyl-.beta.-cyclodextrin solubilized cholesterol (MBC) to Dotap and Superfect further improved their transfection efficiency by 3.8-fold and 2.6-fold, respectively. .beta.-Galactosidase activity was detectable within 1 h of transfection and peaked at 48 h. Nuclear and cytoplasmic separation showed that with Dotap + methyl-.beta.-cyclodextrin solubilized cholesterol (DMBC), the DNA plasmid complex was found in both the nucleus and the cytoplasm. In vivo, murine bladders were transfected with an intravesical instillation of DMBC + DNA for 2 h. Two days later the bladder, lungs, liver, spleen and heart were assayed for the presence of the .beta.-galactosidase gene by staining and PCR. Expression of the gene was confined to the bladder. Both in vitro and in vivo expression was observed after as little as a 15 min exposure to DMBC: DNA. Expression of the marker gene was present up to 30 days after transfection in vivo. From our data it appears that DMBC is the best nonviral agent for the transfection of urothelial cells in vitro and in vivo.

- L6 ANSWER 4 OF 33 CAPLUS COPYRIGHT 2002 ACS
- AN 2001:851785 CAPLUS
- DN 136:11116
- TI Compositions and methods for drug delivery using amphiphile binding molecules
- IN Wolff, Jon A.; Hagstrom, James E.; Monahan, Sean D.; Budker, Vladimir; Rozema, David B.; Slatum, Paul M.
- PA USA
- SO U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. Ser. No. 234,606. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 2001044412	A1	20011122	US 2000-726792	20001129
PRAI	US 1999-234606	A2	19990121		
	US 1999-167836	P	19991129		

AB The present invention relates to the delivery of desired compds. (e.g., nucleic acids) into cells using noncovalent delivery systems which include complexing nucleic acids, amphipathic binding agents, and amphiphiles. To a soln. of plasmid DNA (10 .mu.g/mL) and .beta.-cyclodextrin-epichlorohydrin copolymer (50 mg/mL) was added dodecylamine (100 mM) to form particles of 181 nm size. Prior to the addn. of dodecylamine there were no particles formed and solns. of .beta.-cyclodextrin-epichlorohydrin copolymer and dodecyl amine did not form particles.